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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/454,941	12/02/1999	DAVID B. KIRK	1391P	4446

7590 12/24/2002

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EXAMINER	
KIM, HAROLD J	
ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 12/24/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/454,941	KIRK, DAVID B.
	Examiner	Art Unit
	Harold Kim	2182

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 September 2002 and 19 November 2002* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. This Office Action is in response to the filing of the Reconsideration, Paper # 3, on 9/30/02, has been considered but they are not persuasive. Accordingly, this action is made **FINAL**

2. Claims 1-28 are presented for examination.

Abstract

3. The abstract of the disclosure is objected to because it is not in proper abstract language and format. See MPEP § 608.01(b).

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to **250 words**. It is important that the abstract not exceed 250 words in length since the space provided for the abstract on the computer tape used by the printer is limited. A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

4. **Claims 1, 2, 9-12, 16-17, 20-21 and 25-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Dye, US Patent no. 6,173,381.**

5. In re claim 1, Dye shows a controller chip [fig 5] comprising:

an engine [210, 212, fig 5] for managing a memory [204, 206, 214, 216, 244, fig 5] and including an interface [202]; and

a storage element [204, 206, 214, 216, 244, 246, fig 5] coupled to the engine, the storage element being accessible by a CPU [120, fig 2], where the engine receives commands from the CPU via the interface, manages the storage element and write the commands into the memory.

6. In re claim 2, Dye shows a FIFO buffer [204, 206, 214, 216, fig 5].

7. In re claim 9, Dye shows a graphics controllers chip [212, fig 5].

8. In re claim 10, Dye shows a graphics engine [212, fig 5].

9. In re claim 17, Dye shows the effective size of the FIFO buffer as viewed by the CPU can be as large as the memory [fig 5].

10. Claims 11-12, 16, 20-21, 25-26 are rejected under the same rationale as discussed above in claims 1, 2, 9, 10, 17.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. **Claims 3-8, 13-15, 18-19, 22-24, 27, and 28 rejected under 35 U.S.C. 103(a) as being unpatentable over Dye, US Patent no. 6,173,381, as applied to claims 1, 2, 9, 10-12, 16-17, 20-21 and 25-26 above.**

13. In re claims 3-5 and 7-8, Dye does not explicitly show a circular FIFO buffer, a double buffer, a triple buffer, a checking mechanism. Official Notice is taken that both the concept and the advantages of providing for a circular FIFO buffer, a double buffer, a triple buffer, a checking mechanism are old and well known in the art. Therefore, it would have been obvious to the ordinary skilled person in the art at the time the invention was made to include the circular FIFO buffer, double buffer, triple buffer, checking mechanism in Dye for more flexible device by allowing it to operate in multiple configurations and more reliable system by controlling and predicting data flow.

14. In re claim 6, Dye shows the effective size of the FIFO buffer as viewed by the CPU can be as large as the memory [fig 5].

15. Claims 13-15, 18-19, 22-24, 27, and 28 are rejected under the same rationale as discussed above in claims 3-8.

Response to Arguments

Applicant's arguments filed 9/30/02 have been fully considered but they are not persuasive.

In the remarks, applicants argued in substance that (1) Dye does not teach an engine for managing a memory and including an interface since Dye teaches two FIFO buffers are coupled between the bus interface logic and the execution engine, (2) Dye does not teach elements of checksum mechanism.

Examiner respectfully traverses applicants' remarks.

As to point (1), Dye teaches an engine [210, 212, 202, 204, 206, 214] which managing a memory [204, 206, 214, 216, 244] and including an interface [202]. The examiner notes that the elements [210, 212, 202, 204, 206, 202, 214] can be considered as an engine since an engine is comprising by many different electronic components.

In addition, the limitation of "for managing a memory and including an interface" has no patentable weight since it is Intended Use.

As to point (2), Applicant has attempted to challenge the examiner's taking of Official Notice on pages 8-9; however, applicant has not provided adequate information or argument so that on its face it creates a reasonable doubt regarding the circumstances justifying the Official Notice. Therefore, the presentation of a reference to substantiate the Official Notice is not deemed necessary. The Examiner's taking of Official Notice has been maintained.

Conclusion

Applicant's arguments with respect to claims 1-28 have been considered but they are not persuasive. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 746-7239 for regular communications (for informal or draft communications, please label "PROPOSED" or "DRAFT"), and

(703) 746-7238 for After Final communications.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the technology center receptionist whose telephone number is (703) 306-5631.

Direct any inquiries concerning drawing review to the Drawing Review Branch (703) 305-8404.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Harold Kim whose telephone number is (703) 305-1948. The examiner can normally be reached on Monday-Thursday 6 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (703) 308-3301.

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

HK

Harold J. Kim
Patent Examiner
December 15, 2002/HK

Recent Statutory Changes to 35 U.S.C. § 102(e)

On November 2, 2002, President Bush signed the 21st Century Department of Justice Appropriations Authorization Act (H.R. 2215) (Pub. L. 107-273, 116 Stat. 1758 (2002)), which further amended 35 U.S.C. § 102(e), as revised by the American Inventors Protection Act of 1999 (AIPA) (Pub. L. 106-113, 113 Stat. 1501 (1999)). The revised provisions in 35 U.S.C. § 102(e) are completely retroactive and effective immediately for all applications being examined or patents being reexamined. Until all of the Office's automated systems are updated to reflect the revised statute, citation to the revised statute in Office actions is provided by this attachment. This attachment also substitutes for any citation of the text of 35 U.S.C. § 102(e), if made, in the attached Office action.

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

> **A person shall be entitled to a patent unless –**
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 prior to the amendment by the AIPA that forms the basis for the rejections under this section made in the attached Office action:

> **A person shall be entitled to a patent unless –**
>
> **(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who**

has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

For more information on revised 35 U.S.C. § 102(e) visit the USPTO website at www.uspto.gov or call the Office of Patent Legal Administration at (703) 305-1622.